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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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JAMES C. WRAY 1493 CHAIN BRIDGE ROAD SUITE 300 MCLEAN, VA 22101			EXAMINER FERGUSON, MICHAEL P	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/593,996

**Applicant(s)**

LOLK ET AL.

**Examiner**

MICHAEL P. FERGUSON

**Art Unit**

3679

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date 02/01/07.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

#### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

1. The disclosure is objected to because of the following informalities:

In the specification, page 2, lines 22-23, recites "rails as described in the preamble of claim 1, wherein". It should recite --rails wherein--.

Appropriate correction is required.

***Claim Objections***

2. Claims 1-9 are objected to because of the following informalities:

Claim 1 (line 3) recites "arranged and comprises". It should recite --arranged, said coupling system comprising--.

Claim 1 (line 5) recites "of said rails". It should recite --of one of said rails--.

Claim 1 (line 7) recites "characterised". It should recite --characterized--.

Claim 1 (line 13) recites "gate member (23)". It should recite --gate member (23) of said first coupling part--.

Claim 2 (line 2) recites "characterised". It should recite --characterized--.

Claim 3 (lines 1-2) recites "to claim 1, characterised". It should recite --to claim 2, characterized--.

Claim 3 (line 4) recites "a number of ball bearings". It should recite --at least one ball bearing--.

Claim 3 (line 5) recites "on opposite coupling". It should recite --on the opposite coupling--.

Claim 4 (line 2) recites "claim 1, characterised". It should recite --claim 3, characterized--.

Claim 4 (line 3) recites "said key plate member (22) and said gate member". It should recite --said first coupling part plate member (22) and said first coupling part gate member--.

Claim 5 (line 2) recites "claim 1, characterised". It should recite --claim 3, characterized--.

Claim 5 (lines 3-4) recites "said key plate member (31) and said gate member". It should recite --said second coupling part plate member (31) and said second coupling part gate member--.

Claim 6 (line 2) recites "characterised". It should recite --characterized--.

Claim 6 (lines 3-4) recites "said key plate member (31) and said gate member". It should recite --said second coupling part plate member (31) and said second coupling part gate member--.

Claim 7 (line 2) recites "characterised". It should recite --characterized--.

Claim 8 (line 2) recites "characterised". It should recite --characterized--.

Claim 9 (line 2) recites "characterised". It should recite --characterized--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (lines 1-5) recites "Interlocking coupling system (1) for overhead aligned rails (4,5) of which... comprises a first coupling part (2) and a second coupling part (3), each of said coupling parts (2,3) is arranged at end parts of said rails". It is unclear as to whether the rails have been positively claimed as elements of the claimed coupling

system, or whether such rails are only recited as intended use. For the purpose of examining the application, it is assumed that the rails have been positively claimed as elements of the claimed system. Claims 2-9 depend from claim 1 and are likewise rejected.

5. Claims 3-6 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential structural cooperative relationships of elements, such omission amounting to a gap between the necessary structural connections. See MPEP § 2172.01. The omitted structural cooperative relationships which render the claims indefinite are as follows:

Claim 3 (lines 2-5) recites "each of said coupling parts (2, 3), furthermore, comprises a spring loaded key plate member (22, 31) with a number of ball bearings (224, 225, 313) adapted to engage with said key plate member (22, 31) on opposite coupling part". Claim 3 fails to clearly and positively recite any limitations which define how the key plate members structurally engage and functionally interact with the pivotal gates of the first and second coupling parts, the locking bolt member and the pin to Interlock and unlock the first and second coupling parts. Furthermore, claim 3 fails to clearly and positively recite any limitations which define how each ball bearing structurally engages the key plate member on the opposite coupling part. Claims 4-6 depend from claim 3 and are likewise rejected.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3679

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshinaga (JP 11-60150).

As to claim 1, Yoshinaga discloses an interlocking coupling system for overhead aligned rails **11,12** of which at least one rail **12** is displaceably arranged, the coupling system comprising a first coupling part and a second coupling part **3,2**, each of the coupling parts is arranged at end parts of one of the rails and arranged for interlocking, when the rails are in aligned position, characterized in that each of the coupling parts comprises a pivotal gate member **33,23**, and the first coupling part comprises a locking bolt member **46,47,48** with a tapered end part **47** adapted to engage with a pin **242** projecting from the gate member **23** of the second coupling part **2** and the locking bolt member is adapted to engage with a recess **34** in the pivotal gate member **33** of the first coupling part **3**, and both the gate members are activated by displacing the locking bolt member (Figures 1-8 and 13).

As to claim 2, Yoshinaga discloses a coupling system characterized in that the locking bolt member **46,47,48**, at a distance behind the tapered end part **47**, is provided with a projecting pin member **463** adapted to engage with the pivotal gate member **33** of the first coupling part **3** (Figure 1).

As to claim 7, Yoshinaga discloses a coupling system characterized in that each of the coupling parts **3,2** is provided with an aligning member **47,242** being adapted to engage with an aligning member of the opposite coupling part (Figure 1).

As to claim 8, Yoshinaga discloses a coupling system characterized in that the tapered end part **47** of the locking bolt member **46,47,48** is provided with an axially forwardly open recess for receiving the pin **242** projecting from the gate member **23** of the second coupling part **2**, and the open recess having a transverse extension (an open recess is constituted by the spacing between plates **47**; Figure 5).

As to claim 9, Yoshinaga discloses a coupling system characterized in that the first coupling part **3** comprises means **41,42** for displacement of the bolt member **46,47,48** (Figure 1).

***Allowable Subject Matter***

8. Claims 3-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
9. The following is a statement of reasons for the indication of allowable subject matter:

As to claim 3, Yoshinaga discloses the claimed coupling system with the exception of wherein each of the coupling parts, furthermore, comprises a spring loaded key plate member with at least one ball bearing adapted to engage with the key plate member on the opposite coupling part.

There is no teaching or suggestion, absent the applicants' own disclosure, for one having ordinary skill in the art at the time the invention was made to modify the coupling system disclosed by Yoshinaga to have the above mentioned elemental



Art Unit: 3679

features. Furthermore, such modifications would yield unexpected and unpredictable results.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to coupling systems:

Aoki (US 3,540,153), Kilburg (US 3,345,471), Feketo (US 6,439,955) and Yeung et al. (US 5,405,080) are cited for pertaining to systems comprising first and second coupling parts comprising pivotal gate members.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL P. FERGUSON whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF  
07/11/08

/Michael P. Ferguson/  
Primary Examiner, Art Unit 3679